

TMX Machine Vise

SINGLE STATION VISE OPERATION MANUAL



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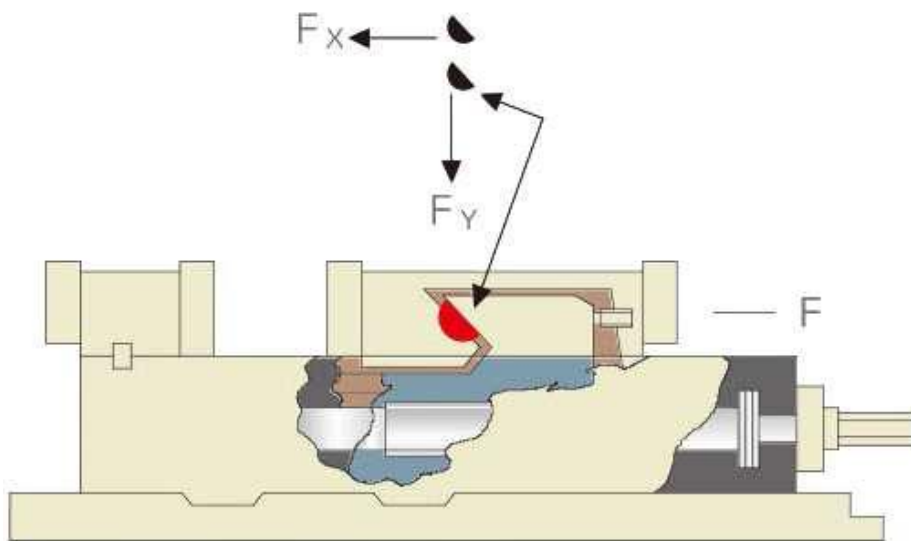


Introduction

Thank you for choose TMX Single Station vise. You have just purchased one of the best machine vises in the industry. We will provide a one-year warranty and a 10-year warranty for the vise body without breaking.

The TMX Single Station vise have Anti-Lift Mechanism design allows the movable jaw to advance in such a way F_x that each pound of force forward induces F_y a 1/2 pound force downward and let workpiece can't move up. This combined with the ball bearings increases jaw clamping pressure.

Other features include: 80,000 psi ductile iron body, Slide surface flame hardened to HS65° to maintain the accuracy, S50C Jaw-Plate has been hardness to HRC54°, semi-hard steel screw.



Set-up Instructions

Please remove the antirust bag and to rub off the antirust first.

Checking the accessories: The handle and chip cover.

The handle is specifically designed to provide maximum torque to your vise (Please see the clamping force below Fig. 1). Your vise should be mounted to a

clean, flat surface.

The surface of vise bottom side must be clean of any chips, debris or dirt of any kind. If necessary, please the mounting surface can be honed and clean the bottom side of the vise with solvent or other cleaner before mounting.

To minimize vise bed deflection, clamp your Auto Well vise to your machine table, pallet, or sub-plate using the T-slots or thru the vise body holes provided.

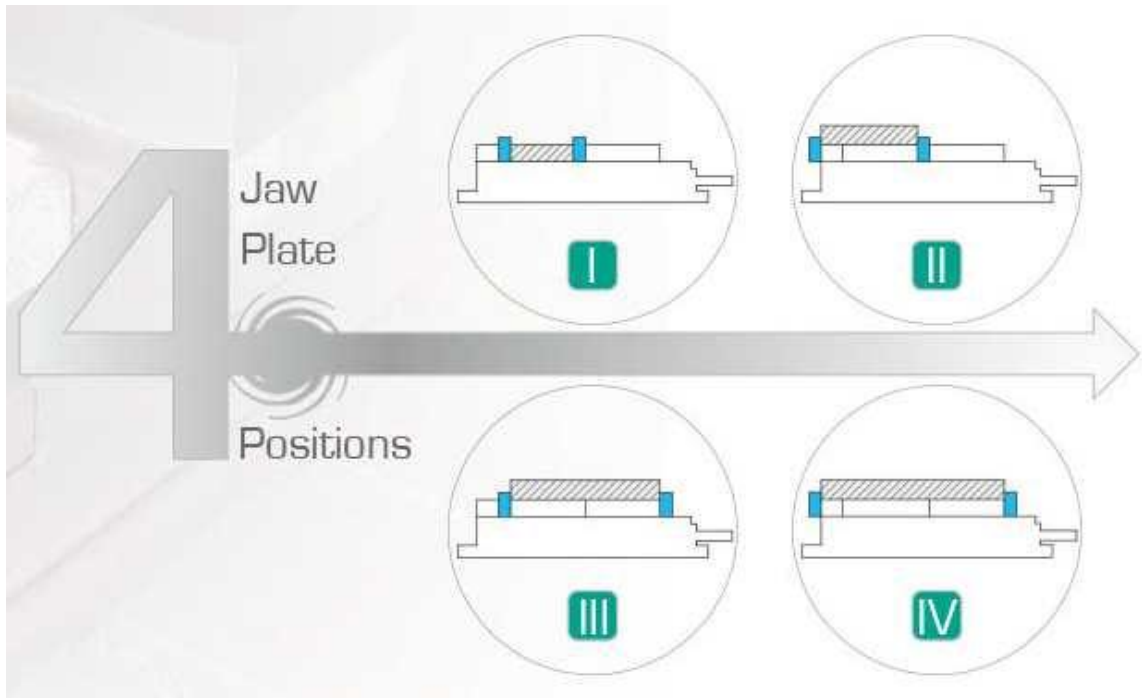
Please be sure to make use of good determination when securing your vise to the installing surface. Be sure your vise is safety and can't move when applying the machine pressure.

TMX Single Station vise has Four Jaw-Plate positions (Fig. 2) to meet your need. (Without 3-227-006 model)

Manual Vise Clamping Force (Fig. 1)

TORQUE KG-M/KN	3-220-006	3-220-0068	3-220-0081	3-227-006	3-220-X69
200	700	600	1000	400	400
400	1000	1200	1400	1200	1400
600	1700	1900	2000	1800	1800
800	2300	2500	2800	2500	2600
1000	3000	3200	3600	3200	3400
1200	3600	4000	4200	4000	4200
1400			4800		

Four Jaw-Plate positions (Fig. 2)



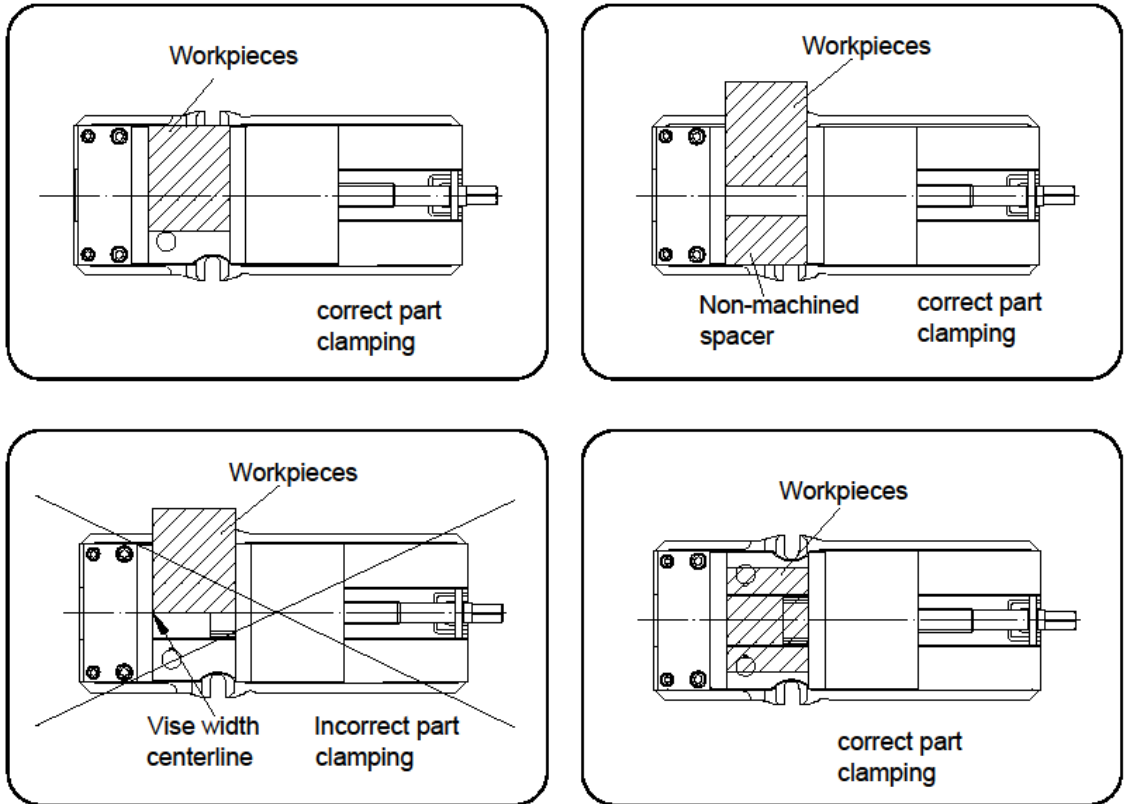
Operating details

For correct vise operation insert the handle on to the hex end of the vise. Rotate clockwise to clamping and counterclockwise to loosen the vise. Please **DO NOT** use any other kind of pressure to open or close the vise. Use handle, combined with the correct amount of torque will provide you with all the clamping force you will need to machine your parts. It is not recommended to use handle extensions, air wrenches, breakers or hammers, if used, will void the warranty. This will also damage the ball bearings and threads.

To correct clamp a workpiece in the vise you should place the workpiece in the center of the jaws resting on the ways of the vise. Clamping only on one side or above the movable and stationary jaws can let your workpiece lift or loss of accuracy. (Please see Fig.3)

If one-sided clamping is necessary you **MUST** use another workpiece on the other side. When using parallels or step jaws you must select a same size that

keeps the bottom of the clamped workpiece at or below the top of the movable and fixed jaws. Always use jaw plates for clamping. If jaw plates are not used damage to the establishment surface of the movable and fixed jaw will occur. This will cause in reduced clamping accuracy. (Please see Fig.3)



(Fig. 3)

Troubles solution

If properly maintained the vise will operate trouble free for many years. In some case it will be necessary to troubles clearing. Use the information below and help in the process.

Problem 1: The vise turns very hard or will not turn.

Solution: As a new vise the brush seal could be hard. Let for break in of vise.

Solution: As a used vise, it could be full of chips in the vise and spindle nut inside. Cause the main screw was jammed. Please clean or disassemble and lubricating vise.

Problem: The workpiece was move up.

Solution 1: You may disassemble the moveable jaw and clean the moveable jaw. Remove the chip from the vise body surface and need to lubricating the vise body surface.

Solution 2: If moveable jaw was loose, please screw the moveable jaw again.
(Just hold not to tight)

TMX Machine Vise

INSPECTION CERTIFICATE

MODEL: _____

SERIAL# _____

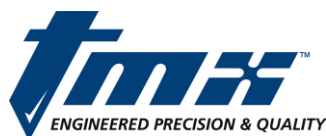
#	Item	Tolerance	Actual
1	Bed Height	+/-0.0005"(+/-0.012mm)	
2	Parallelism of Vise Base To Bed.	0.0006"(0.015mm)	
3	Perpendicularity of Jaws To Vise Bed.	0.0005"(0.012mm)	
4	Flatness of Base.	0.001"(0.02mm)	

3-220-006 & 3-220-0068 & 3-220-X69 Bed Height are 2.875"(73.025mm)

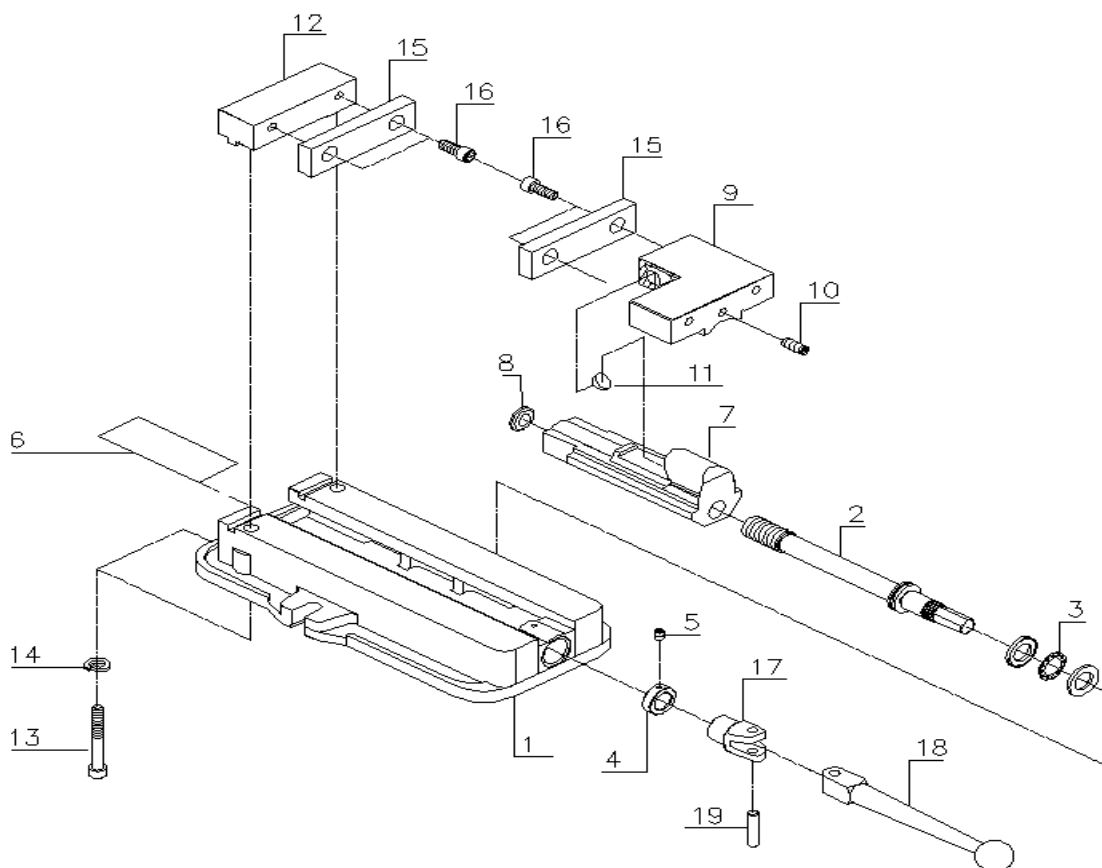
3-220-0081 is 3.31"(81.074mm)

3-227-006 is 3.189"(81mm)

Inspected By: _____ Date: _____



TMX Model 3-220-006



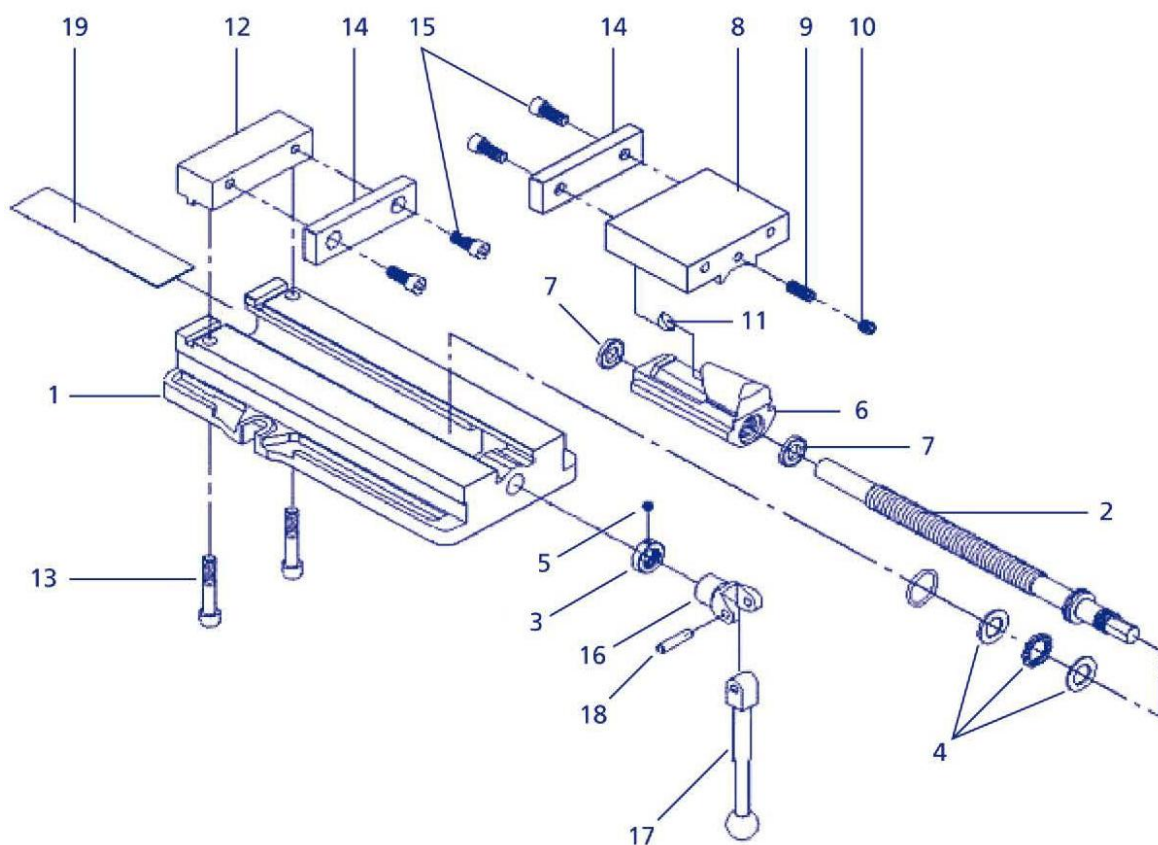
Number	Description	Quantity
1	Body	1
2	Main Screw	1
3	Bearing Thrust Collar	1
4	Collar	1
5	Collar Set Screw	1
6	Chip Cover	1
7	Vise Nut	1
8	Brush	1
9	Movable Jaw	1

10	Bolt	1
11	Semi-sphere Segment	1
12	Fixed Jaw	1
13	Bolt	2
14	Washer	2
15	Jaw	2
16	Bolt	4
17	Handle Socket	1
18	Handle Bar	1
19	Pin	1

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TMX Model 3-220-0068



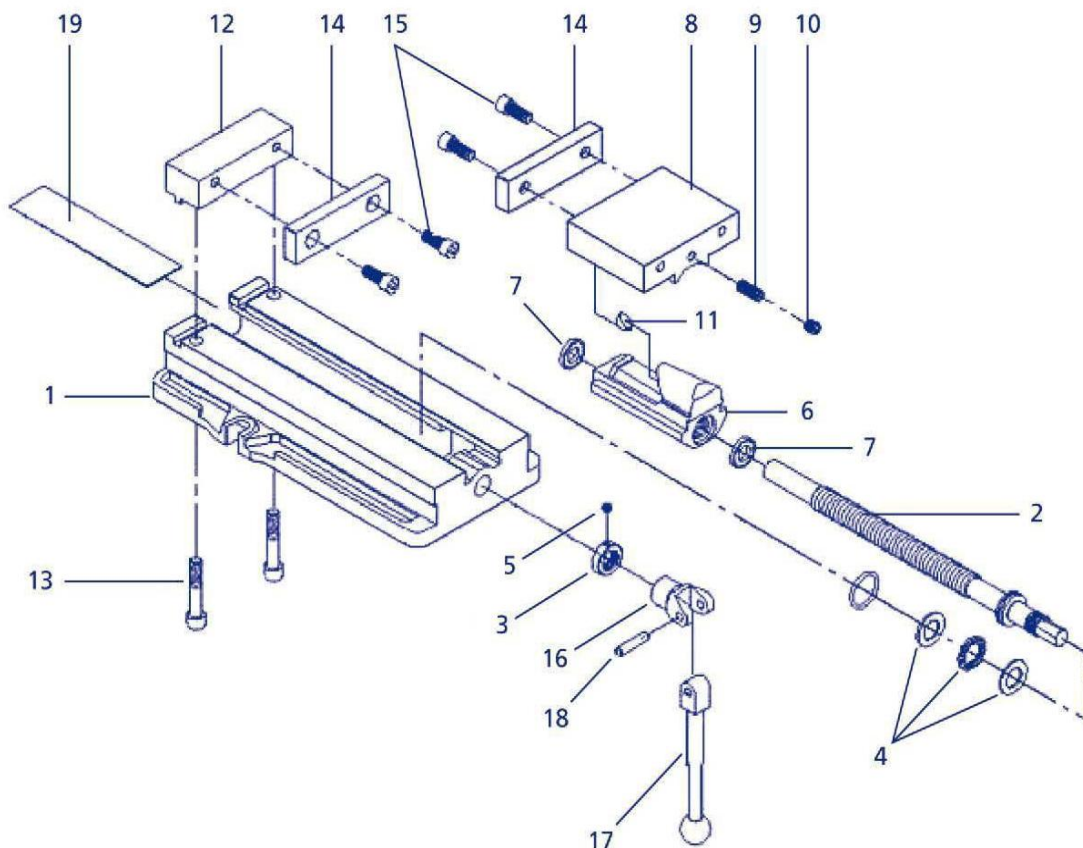
Number	Description	Quantity
1	Body	1
2	Main Screw	1
3	Collar	1
4	Bearing Thrust Collar	1
5	Collar Set Screw	1
6	Vise Nut	1
7	Brush	2
8	Movable Jaw	1
9	Bolt	1

10	Bolt	1
11	Semi-sphere Segment	1
12	Fixed Jaw	1
13	Bolt	2
14	Jaw	2
15	Bolt	4
16	Handle Socket	1
17	Handle Bar	1
18	Pin	1
19	Chip Cover	1

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TMX Model 3-220-0081



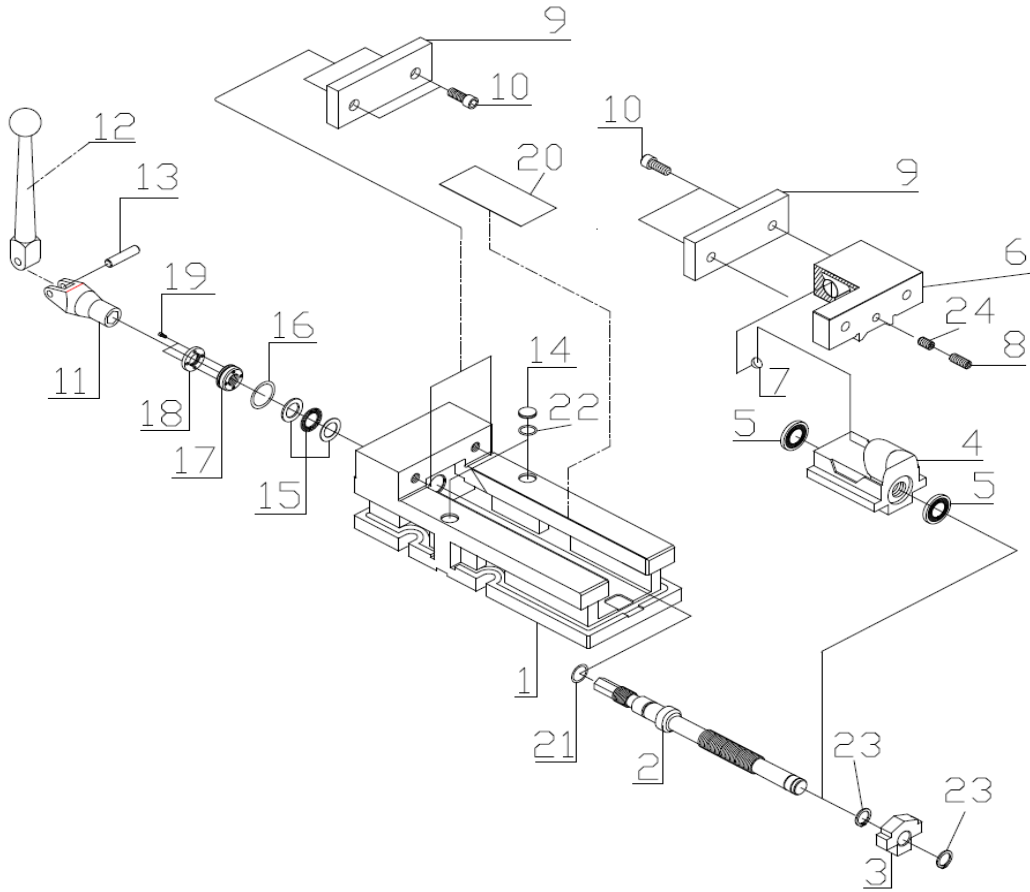
Number	Description	Quantity
1	Body	1
2	Main Screw	1
3	Collar	1
4	Bearing Thrust Collar	1
5	Collar Set Screw	1
6	Vise Nut	1
7	Brush	2
8	Movable Jaw	1
9	Bolt	1

10	Bolt	1
11	Semi-sphere Segment	1
12	Fixed Jaw	1
13	Bolt	2
14	Jaw	2
15	Bolt	4
16	Handle Socket	1
17	Handle Bar	1
18	Pin	1
19	Chip Cover	1

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TMX Model 3-227-006



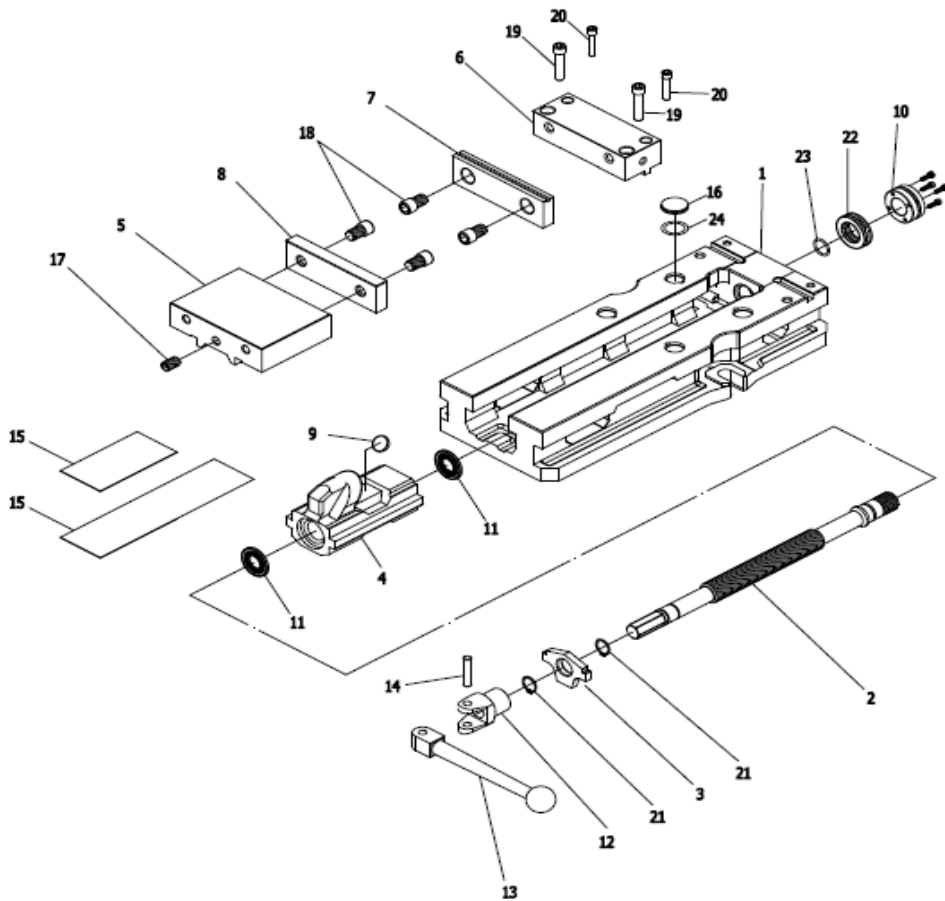
No.	Description	Q'ty
1	Body	1
2	Main Screw	1
3	Spindle case	1
4	Vise Nut	1
5	Brush	2
6	Moveable Jaw	1
7	Semi-sphere Segment	1
8	Adjusting Screw	1
9	Jaw Plate	2
10	Jaw Plate Set Screw	4
11	Handle Socket	1
12	Handle Bar	1

No.	Description	Q'ty
13	Pin	1
14	Chip Cover	2
15	Thrust Bearing	1
16	O-Ring	1
17	Locking Screw Nut	1
18	Stable Screw Nut	1
19	Screw	4
20	Slide Cover	1
21	O-Ring	1
22	O-Ring	2
23	C-Ring	2
24	Screw	1

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TMX Model 3-220-X69



No.	Description	Q'ty
1	Body	1
2	Main Screw	1
3	Spindle Case	1
4	Vise Nut	1
5	Movable Jaw	1
6	Fixed Jaw	1
7	Jaw	1
8	Jaw	1
9	Semi-sphere Segment	1
10	Locking Screw Nut	1
11	Brush	2
12	Handle Socket	1

No.	Description	Q'ty
13	Handle Bar	1
14	Pin	1
15	Slide Cover	2
16	Chip Cover	4
17	Adjusting Screw	1
18	Bolt	4
19	Bolt	2
20	Bolt	2
21	C-Ring	2
22	Ball Bearing	1
23	O-Ring	1
24	O-Ring	4

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